

# Sustainability Report **2011**



CANAL DE PANAMÁ

*This report covers the  
period from October 2010  
to September 2011*

# CONTENT



<b>I. ABOUT THE PANAMA CANAL</b>	<b>2</b>
• Organization profile	4
• Vision, Mission, Values and Ethics	6
• Structure	9
<b>II. FOCUSED ON SUSTAINABILITY</b>	<b>10</b>
• Governance in the Canal	14
• Commitments with Stakeholders	16
• Transparency and Accountability	17
<b>III. TRANSCENDING CONTRIBUTIONS</b>	<b>18</b>
• Performance and Results	20
• Contribution to the Country's Economy	21
• Contributions to Education and Culture	26
• The Value of the Route	28
• Fair Business Practices in the Value Chain	30
<b>IV. INDISPENSABLE TALENT</b>	<b>32</b>
• Occupational Health and Safety	33
• Training and Development	35
• Equity and Recognition	37
• Employee Rights	39
• Quality of Life	41
• Labor Force Statistics	43
<b>V. VITAL ALLIANCE</b>	<b>44</b>
• Conservation of the Panama Canal Watershed	47
• Environmental Sustainability Culture	49
• The Green Route	51
• Quality and Quantity of Water	53
• Corporate environmental Performance	55
• Environmental Responsibility in the Expansion Program	57
<b>VI. CORPORATE VOLUNTEER PROGRAM</b>	<b>60</b>
<b>VII. AWARDS AND RECOGNITIONS</b>	<b>66</b>
<b>IX. PERFORMANCE</b>	<b>69</b>
<b>X. SURVEY</b>	<b>71</b>



Rómulo Roux / Chairman of the Board of Directors

Alberto Alemán Zubieta / Administrator

# MESSAGE

---



Dear Canal friends,

We are pleased to present the Panama Canal Authority (ACP, for its initials in Spanish) Sustainability Report for fiscal year 2011. In this document you will find reflected our commitment to provide excellent service to our clients, to the country's prosperity, the development of our employees and environmental well-being. We always aim to promote the synergy between the Canal and all its stakeholders, while building a strong foundation for sustainable development.

Nine years ago we formalized our commitment to the ten principles of the United Nations Global Compact. Our practices in terms of respect and protection of human rights, good labor practices, environmental management and anti-corruption measures have been supported and strengthened by the ten principles set out in this pact. Concrete actions aimed at the achievement of future goals are a source of pride for the Canal.

Today, 12 years after the transfer of the waterway to Panamanian stewardship, the Panama Canal is a national and international reference in global trade and Panama's sustainable development.

Each direct contribution that the Canal makes to the National Treasury helps the State have increased resources to address development opportunities. Every day we strive to meet and establish good business practices that are supported by transparency in management and ethical values, which are part of our work style.

The Canal's outstanding performance and the contributions are possible thanks to our valuable human resource. The Canal's past experience shows that its main asset is its workforce; hence the ongoing training programs for its employees, internship initiatives and training opportunities for students. The development of our human

resource is evident in a work environment based on a merit system, respect for human rights, labor rights, and the continued development of our workforce.

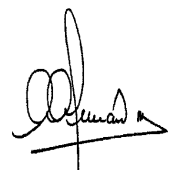
The Canal's sustainability vision encompasses the way in which the organization protects the environment, this being vital to its operation. The management of the Canal Watershed, which provides us with the necessary water resource for potable water supply and the transit of vessels, is recognized worldwide. This entails, inter alia, the strengthening of its administration, management, and conservation, in addition to strengthening social participation in the different organizations throughout the Watershed; and awareness education and reforestation projects, among others, in the communities.

This year we have also moved forward at a good pace in the execution of the Expansion Program, paying particular attention to economic, social and environmental aspects. The expansion will contribute to the development of international maritime trade by doubling the Canal's capacity and offering economies of scale to our clients. This expansion will also generate great benefits to our country.

The men and women who have the privilege of serving the country from our standpoint at the Panama Canal, will continue to work every day with the certainty of knowing that the results of our efforts will translate into prosperity for future generations.



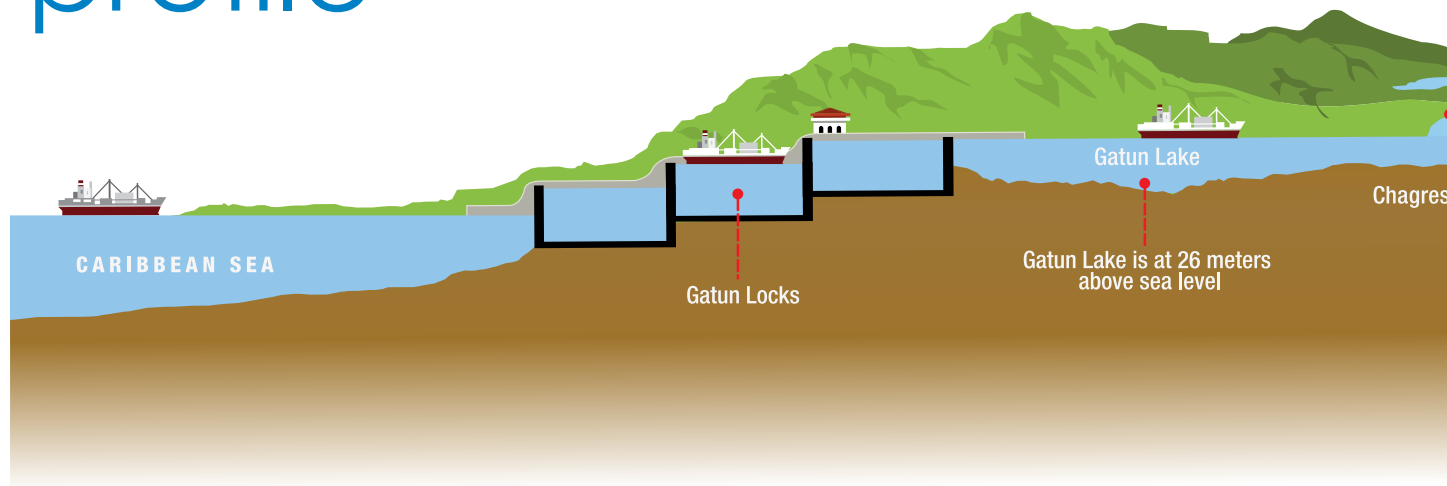
**Rómulo Roux**  
Chairman of the Board of Directors



**Alberto Alemán Zubieta**  
Administrator



# ORGANIZATION profile



## A LITTLE BIT OF HISTORY...

The Panama Canal is a saga of ingenuity, perseverance and courage which dates back to the early sixteenth century when the Spanish arrived to the Isthmus. The idea of building a route that would connect the Atlantic and Pacific Oceans goes back to those days.

The first effort to build an all-water route through Panama was initiated by the French in 1880, but financial problems and diseases led them to failure. When Panama consolidated its independence in 1903, it agreed to build the Canal with the United States. This engineering feat was inaugurated on August 15, 1914, and administered by the United States until 1999.

At noon on December 31, 1999, Panama assumed full administration, operation and maintenance of the Canal, in compliance with the Torrijos-Carter Treaty of 1977. The waterway is operated by the Panama Canal Authority (ACP), an autonomous government agency with a constitutional mandate to make the Canal an efficient and profitable organization that provides a continuous and efficient service to global maritime trade.

## HOW DOES IT WORK?

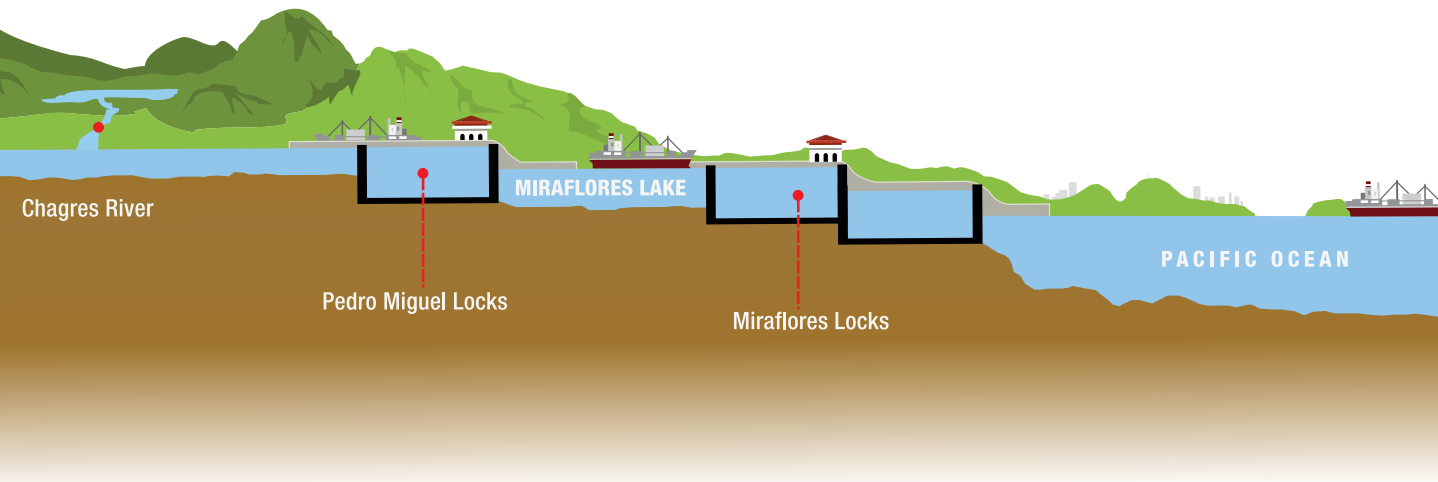
The Panama Canal serves as a shortcut to save shipping distance, time and costs in transporting all kinds of goods. Stretching about 80 kilometers, the route connects the Atlantic Ocean and Pacific Ocean in one of the narrowest strips of land of the Americas.

The interoceanic waterway operates through three sets of locks, each with two lanes, which serve as water lifts that raise vessels to the level of Gatun Lake, 26 meters above sea level, to allow the vessels to cross the Continental Divide, and then lower them to sea level on the other side of the Isthmus.

Since its opening in 1914, more than a million vessels from all over the world have transited the Canal.

## A CANAL FOR THE PANAMANIAN PEOPLE

The Panama Canal constitutes an inalienable patrimony of the Panamanian nation; therefore, it may not be sold, assigned, mortgaged, or otherwise encumbered or transferred. By law, once the operation, investment, modernization



and expansion costs are achieved, the surplus funds are forwarded to the National Treasury. During the 12 years of Panamanian administration, direct contributions have exceeded 6.6 billion dollars.

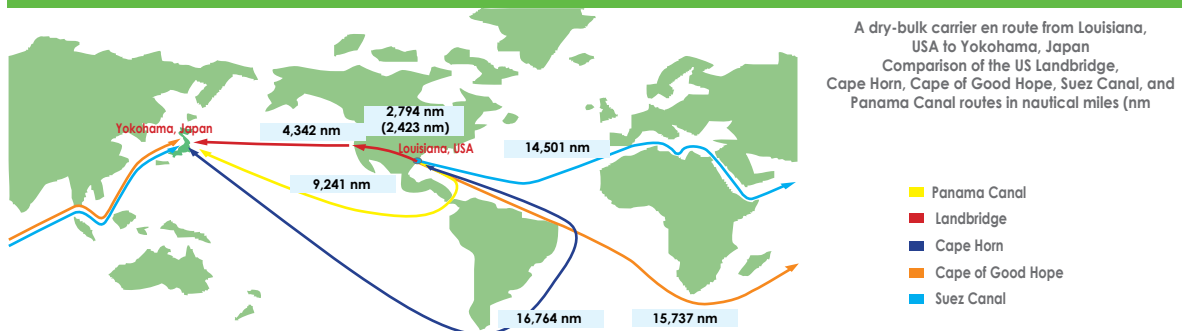
### A CANAL FOR THE WORLD

Thanks to the Panama Canal, each week many vessels can transit to more than 80 countries by using over 144 maritime routes. In 2014, when the Panama Canal will celebrate 100 years of operation, the Third Set of Locks will be completed, thus concluding the Expansion Program which

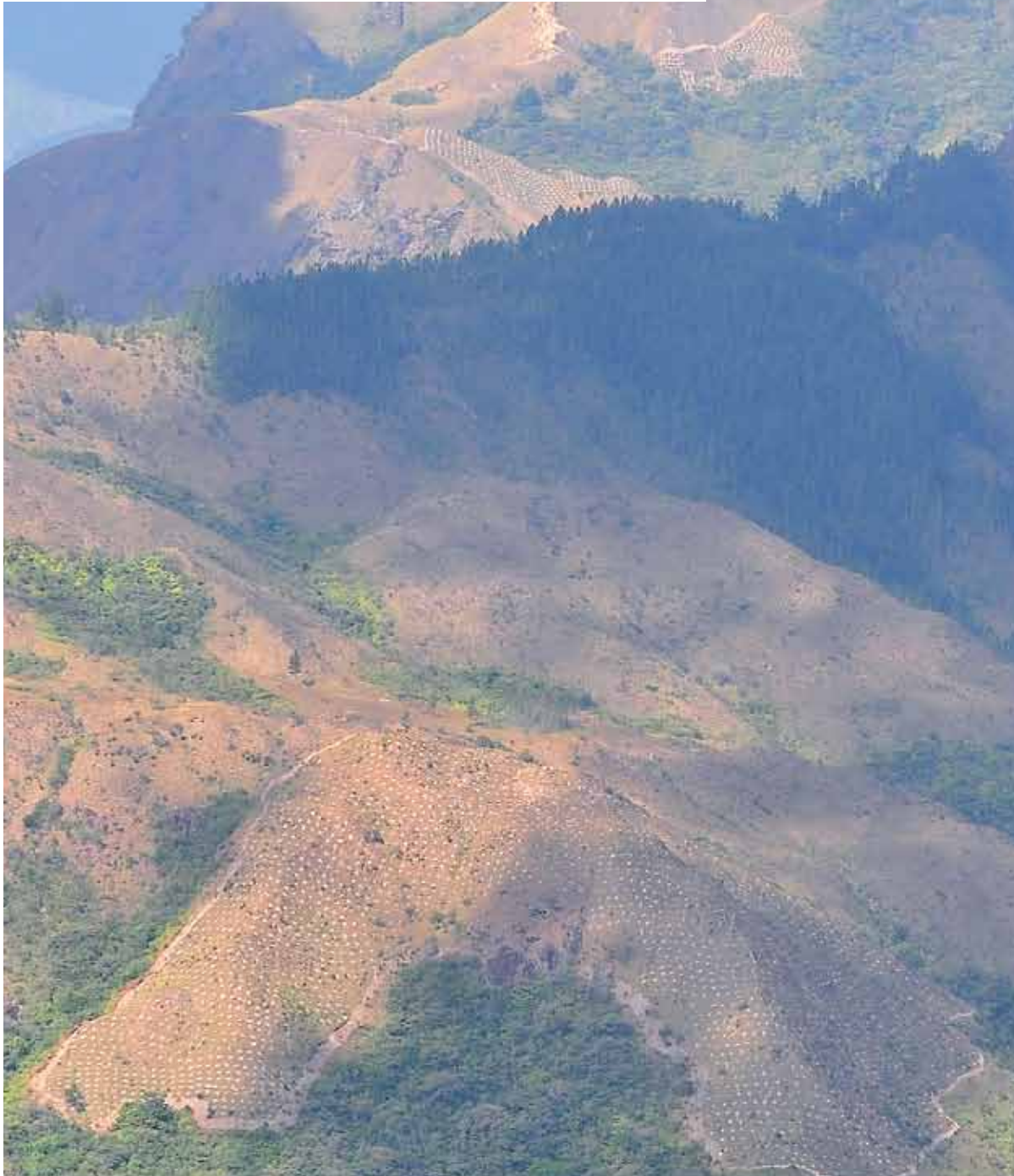
will double the capacity to meet the growing demands of world trade.

The Third Set of Locks will use a water basin system that will achieve significant savings of the precious liquid by using 7% less water than the existing locks during transits. In addition, the expansion will also contribute to mitigate climate change, since vessels with larger cargo capacity will be allowed to transit the Canal route; therefore reducing greenhouse gas emissions (GGE) that result when longer alternat routes are used.

### COMPARISON OF DISTANCES USING THE PANAMA CANAL



# VISION, mission, values, and ethics



*At the El Montuoso Forest Reserve, located on the Province of Los Santos, species of native trees are in full development after the implementation, two years ago, of the Expansion Program reforestation plan in this area.*

## VISION:

**WORLD LEADER** in services to the maritime industry and in sustainable development for the conservation of the Panama Canal watershed.

**CORNERSTONE** of the global transportation system and driving force for the progress, development and growth of Panama.

**MODEL** of excellence, integrity and transparency in our conduct; committed to the integral development of our human resource team.

## MISSION

To produce the maximum sustainable benefit from our geographical position.

**Our business.** This enterprise is charged with operating, maintaining and improving the Panama Canal so that it remains the route of choice for our customers.

**Our country.** We bring wealth to Panama and contribute with our efforts to the nation's welfare, development and progress, and to an improved standard of living for all Panamanians.

**Our customers.** We build lasting relationships with our customers, understanding and anticipating their needs, and offering quality service.

**Our people.** We recognize that the Canal worker is the most important resource in achieving excellence.

We will be successful to the extent that we provide value and service to our customers, increase our corporate value and thus contribute to the prosperity of Panama.

## CORPORATE VALUES

Honesty	Loyalty
Transparency	Responsibility
Competitiveness	Reliability

## ETHICS

The Panama Canal Ethics and Conduct Program promotes appropriate behavior and encourages citizen awareness to strengthen transparency and integrity of the organization.

At the end of fiscal year 2011, a total of 6,083 employees received training, exceeding by more than 200 the goal of training 60% of the workforce in the Rules of Ethics and Conduct. This training was accomplished through classes, on-line courses and questionnaires.

In FY 2011, the Panama Canal was recognized by the Ethisphere Institute as one of the most ethical companies in the world for demonstrating leadership in good business practices, for its code of ethics, history of law enforcement, its investments in innovation and sustainable practices. The Ethisphere Institute is a leading research center dedicated to the creation, promotion and dissemination of best practices in business ethics, corporate social responsibility, sustainability and anti-corruption.



# BOARD of Directors

## CHAIRMAN



Rómulo Roux



Adolfo Ahumada  
Director



Alfredo Ramírez, Jr.  
Director



Eduardo A. Quirós B.  
Director



Norberto R. Delgado D.  
Director



Ricardo De La Espriella T.  
Director



Guillermo O. Chapman, Jr.  
Director



Rafael E. Bárcenas P.  
Director



Marco A. Ameglio S.  
Director



Nicolás Corcione  
Director

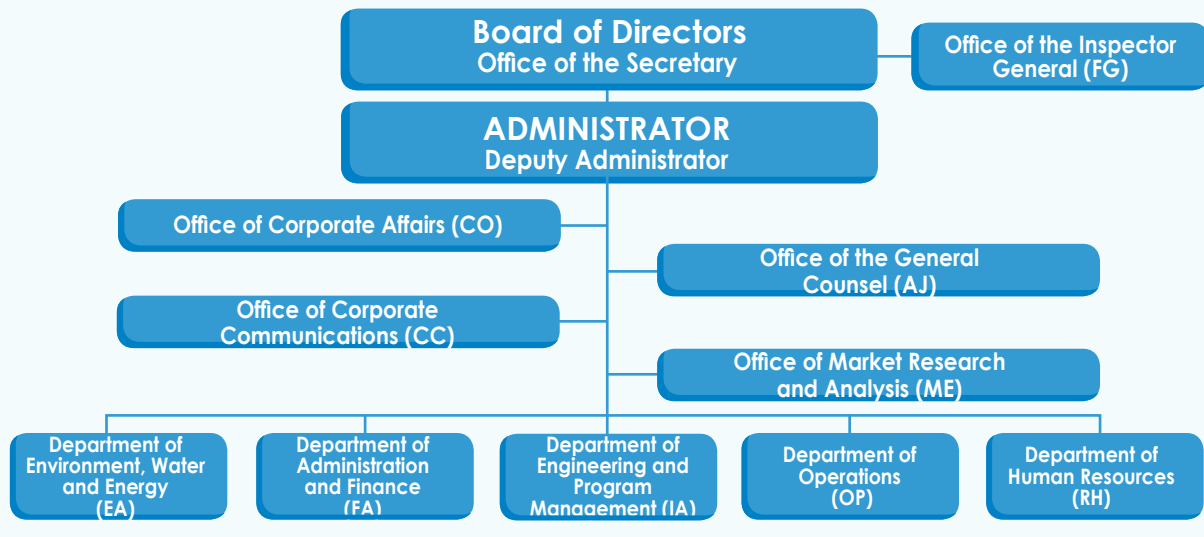


José A. Sosa A.  
Director



*Members of the Board of Directors visit the Expansion Program site.*

# ORGANIZATIONAL Structure



## ADMINISTRATOR



Alberto Alemán Zubieta

## DEPUTY ADMINISTRATOR



José Barrios Ng

## EXECUTIVE VICE-PRESIDENTS



Manuel E. Benítez  
Operations



Francisco Loaiza B.  
Human Resources



Francisco J. Míguez P.  
Administration and Finance



Jorge L. Quijano  
Engineering and Program  
Management



Esteban G. Sáenz  
Environment, Water,  
and Energy

## VICE-PRESIDENTS



Luis Alfaro  
Engineering



Álvaro A. Cabal  
General Counsel



Ana María P. de Chiquilani  
Corporate Affairs



Manuel Domínguez  
Corporate  
Communication



Rodolfo Sabonge  
Market Research  
and Analysis





# FOCUSED on sustainability





*Construction of the Third Set of Locks on the Atlantic Side is under way at the former 1939 US excavation site. Progress of the excavation gave way to civil works which started in July 2011 with the placement of the first batch of structural concrete on the floor of the upper chamber.*

Inaugurated on August 15, 1914, this fiscal year the Panama Canal celebrated 97 years of operation. After a lifetime of profitable operations, in peaceful co-existence with the environment and, as the axis of prosperity of the Panamanian society, the different generations of Canal employees have left in the organization a legacy of commitment with the pillars that support sustainable development.





Environmental well-being, which provides water for Canal operations; the welfare of communities that care for and protect water resources, and the Canal workforce with unique capabilities essential to the operation of the waterway, are all key elements to the sustainability of the organization.

This document reports the progress made through programs to strengthen the pillars supporting the sustainable development of the Panama Canal, and its efforts in social responsibility focused on its stakeholders.

The Panama Canal is aware that the water resource is essential for continuous and efficient operations. That is why

the welfare of the Canal Watershed is of vital importance to the sustainability of the organization. The water that is used to operate the Canal comes from a balanced and healthy ecosystem thanks to the efforts made to manage, maintain, use, and preserve it. The watershed is not only vital to Canal operations, it is also the main source of fresh water for two thirds of the population.

A healthy watershed is the reflection of a community that ensures environmental well-being of its environment. With this in mind, the Panama Canal leads efforts to educate and develop the communities of the Canal Watershed, so that they can evolve sustainably, providing innumerable benefits that go beyond its geographical boundaries.

In turn, the Canal's human capital is the force that drives the Panama Canal. Its more than 10,500 employees make up an efficient and vital force that is committed to the country's progress. Each one of the Canal's employees play an essential role in the industrious task of achieving sustainable development goals that are of vital importance for future generations in Panama. The Panama Canal invests in the welfare of its human asset, and occupational health and the safety of its employees are always a priority. It also ensures development opportunities by increasing training workshops and growth opportunities, ensuring productivity and equity, maintaining good labor relations, and improving their quality of life.

Corporate social responsibility at the Panama Canal focuses on its five stakeholders: customers, employees, community, State,

and suppliers. Aligned with the vision of being part of an important purpose, employees at the Panama Canal work together to give life to the Corporate Volunteer Program. More than 1,500 employees make up the network of volunteers, which is active throughout the year, carrying out continuous efforts in social responsibility activities to benefit the stakeholders of the Panama Canal.

The effectiveness the Canal accomplishes developing in a sustainable path will result in numerous benefits for its human resource, neighboring communities, the country and the planet. To obtain the best possible benefit from the isthmus' geographical position is ACP's main mandate, doing so in a sustainable manner, will undoubtedly be its greatest legacy.



# GOVERNANCE

## in the canal



The ACP's governance falls within the scope of the Political Constitution of the Republic of Panama, the Treaty Concerning the Permanent Neutrality and Operation of the Panama Canal, Organic Law 19 of June 11, 1997, of the Panama Canal Authority, its vision, mission, and corporate values, regulations, manuals, procedures, and practices.

Governance is applied through participatory and transparent management, taking into consideration the different interests the organization serves or responds to, such as the Panamanian nation, the workforce, its customers, users and contractors, foreseeing equity and inclusion in areas of particular sensitivity as well as effectiveness and efficiency in the operation of the Panama Canal,

and its activities and related services, and preserving, protecting, conserving and improving the environment and water resources of the Panama Canal Watershed (PCW).

The Panama Canal Authority is an autonomous legal entity established under the terms of the National Constitution and the Organic Law, which shall be exclusively in charge of the administration, operation, conservation, maintenance, and modernization of the Panama Canal and its related activities, in order that it may operate the Canal in a manner that is safe, continuous, efficient, and profitable. The ACP shall be responsible for the administration, maintenance, use, and conservation of the water resources of the Panama Canal Watershed, which



include the waters of the lakes and their tributary streams. To safeguard this resource, the Authority shall coordinate with the corresponding specialized governmental and non-governmental organizations, and is empowered to approve strategies, policies, programs, and projects, both public and private, that may affect the watershed.

The ACP has administrative and financial autonomy, its own patrimony, and the right to manage it. Its administration shall be under a board of directors composed of eleven independent members, which is empowered to establish policies for the operation, improvement and modernization of the Canal, and charged with the functions and duties set forth in the Constitution, the Organic Law and its Regulations; including the appointment of the Administrator, who is responsible for the implementation of the policies issued by the Board of Directors, the daily operation of the Canal, and the required authority for its execution.

The administration of the ACP is entitled to establish and charge tolls, rates, and fees for the services it renders. These funds are deposited directly in the ACP's patrimony, which is completely independent from the State's patrimony, providing the users and interested parties the opportunity to participate in the public consultation process intended to adjust the tolls and admeasurement rules, and be part of the national maritime strategy. With respect to labor relations, the ACP guarantees its workers with the right to unionize, organize, and participate in labor organizations and to

bargain collectively. The organization also grants them the right to grieve; provides administrative and negotiated grievance procedures, and offers other autonomous and independent mechanisms for the resolution of individual and collective labor disputes.

The ACP's governance is based on the fact that it is an autonomous legal entity, independent from that of the nations' Central Government, with its own patrimony, and the right to administer it, and its budget will not be a part of the general budget of the Government of Panama. The Authority will conduct internal and external audits, and subsequent control by the Republic's Treasury Inspector's Office. It has its own special and autonomous acquisition and purchase regime, which is not subject to state controls, and builds on the efficient and expeditious procurement of supplies and services, decentralized delegation of authority for contracting, promotion, and open competition in purchasing and contracts, impartiality in decision-making, and equity in the relationship with contractors. The Authority shall be subject to a special employment regime based on a merit system, with special regulations on salaries and pay scales, and the right to collective bargaining. Regarding economic and financial aspects, the organization generates its income directly and indirectly. These funds do not come from the State or from its tax revenues, nor is the State committed to its obligations.

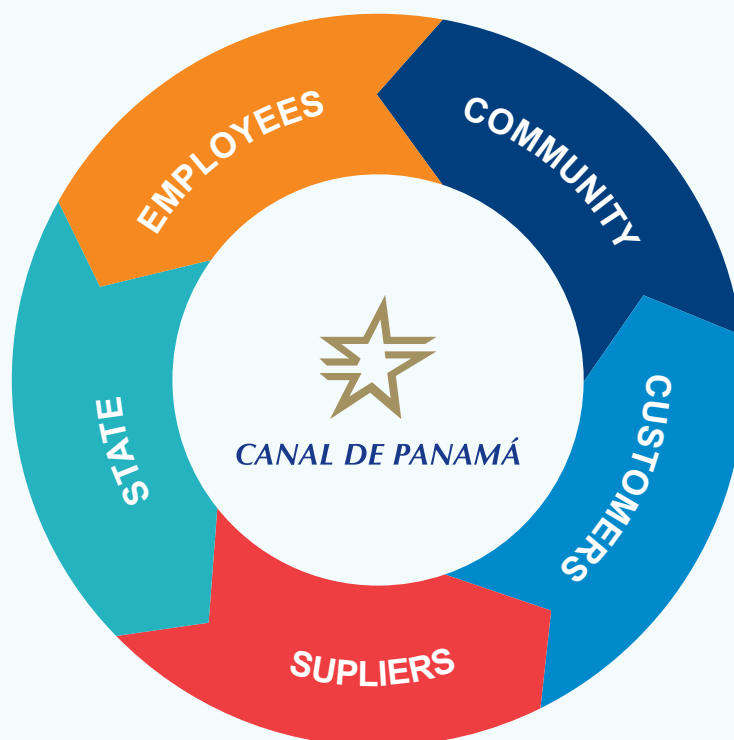


# COMMITMENTS

## with stakeholders

### ACP Strategic Destiny

"Be the promoter of growth and sustainable development of the country, completely integrated with society"



**Customers:** Improve relations with customers by providing a safe and reliable service, keeping the communication channels open.

**Employees:** Ensure employee wellness, provide opportunities for growth and development of employees and strengthen ACP's ethical culture.

**Community:** Contribute to the integral social development of communities through the transfer of knowledge and the

participatory aid of the organization.

**State:** Maintain contributions to the National Treasury and promote the sustainable development of the country. Contribute to the country through effective integration.

**Suppliers:** Promote diversity in the contractual process, supervising compliance with suppliers in terms of quality and ethical conduct.

# TRANSPARENCY and accountability



Transparency and accountability are essential elements which serve as pillars of a democratic society. Transparency gives stakeholders access to Information and accountability explains actions taken to society so they can be analyzed and reviewed, taking responsibility for their decisions.

The Panama Canal's management is based on the corporate values that govern its business model and guide the behavior of its employees.

The Panama Canal is known to have a transparent administration, and for communicating in a clear and timely manner its actions to the Panamanian people and the general public. The Canal is audited every year by internal and external auditors, and by the Republic's Treasury Inspector's

Office. Aligned with its corporate values, it has a Code of Ethics and an internal risk-based control system, which ensures reasonable compliance with its objectives and corporate goals.

For more information on Accountability and related topics, please refer to this link <http://www.pancanal.com/esp/rend-ctas/index.html> on the ACP's Web site:

- Regulations and Organizational Structure
- Budget and Projects
- Contracting and Payroll
- Internal Controls
- Audited Financial Statements
- Code of Ethics
- Expansion Program Progress Reports
- General Information



# TRANSCENDING contributions



Thanks to the strategic geographical position of the Isthmus, the Panama Canal enjoys a unique competitive advantage, generating in the last 11 years of Panamanian administration more than 6.6 billion dollars. By law, once the operation, investment, modernization and expansion costs are achieved, the surplus funds are forwarded to the National Treasury. The Panama Canal constitutes an inalienable patrimony of the Panamanian nation; therefore, it may not be sold, assigned, mortgaged, or otherwise encumbered or transferred. The effectiveness of the Canal to remain open to the peaceful and uninterrupted transit of vessels from all nations of the world, translates into benefits for the Panamanian society and the international maritime cluster. The Panama Canal is committed to the country and devotes all its efforts toward the progress of the Panamanian people, focusing on management performance and results. The Canal's contribution to the country's economy, education and culture allows it to promote the value of the route and sets an example through fair business practices in the value chain.



# PERFORMANCE and results



The ACP has a strategic model that has allowed the organization to create a culture of measurement and monitoring. Strategic goals are set annually and aligned with strategic objectives thereby creating sustained value for all stakeholders. What is sought is to align these components, so that shareholders and customers are satisfied, the processes are efficient and effective, and employees are trained and motivated.

In addition to assessing individual performance, the ACP has the Corporate Performance Index (IDC), which measures and monitors the organization's corporate performance. This index is a mechanism that pays bonuses to Canal employees for their contribution to the organization's good performance. For fiscal year 2011, the index closed at 110.9 percent, surpassing by more than 10 points the goal for that year. Additionally, the ACP has

indicators that measure the productivity and results in different areas of the organization, and at all levels with respect to operations, finance, customers, environment, and human resources.

Corporate goals and initiatives and the IDC are aligned with strategic objectives for FY 2011.

## 2011

	Indicator	Weight	Goal	Results
<b>Finance</b>				
<b>40%</b>	Operating Margin	15	50%	53.0%
	Operation Expense per CPSUAB97	15	1.83	1.76
	Utility Growth Percentage	10	3.0	18.93%
<b>Clients and Operations</b>				
<b>35%</b>	Transit Time	15	10.2	10.6
	Earned Value	15	100%	97.4
	Weighted Index of Cost per Unit of Water and Energy Production	5	100	90.3
<b>Human Resource</b>				
<b>25%</b>	Learning and Development Index	5	100%	133.0%
	Employee Wellness Index	5	100%	127.9%
	Occupational Health Index	8	100	102.4
	Absenteeism Index	7	2.49	2.15%
		100		110.9

# CONTRIBUTION

## to the country's economy



The ACP has the established mission to contribute wealth to Panama, as well as to provide, with its operation, for the welfare, development, progress, and improvement of the quality of life of its entire population. To this end, the efforts of ACP are directed toward obtaining the maximum sustainable benefit from our geographic location. The vision, goals, and corporate values of this organization all revolve around this mission.

The direct financial contribution of the Panama Canal to all Panamanians include:

- Direct and indirect contributions to the National Treasury in the form of payments or transfers that are used in the national budget to support directly or indirectly the costs or investments in education, health, housing, infrastructure, and other services.

- The direct contributions of the Panama Canal to the domestic economy include the net wages paid to its employees, the local procurement of goods and services (which includes the purchases made solely from companies registered in Panama), the local component of the Panama Canal Expansion contracts, and the payment of consultant services in Panama.
- The resultant multiplying effect that creates secondary demands in the local economy.

In addition to these direct contributions, there are numerous activities or economic sectors, such as the ports, the Colon Free Zone, bunkering and shipping lines that are linked to Panama Canal operations. These links generate additional indirect impacts

throughout the entire international trade and logistics conglomerate.

The Panama Canal's direct impact on the economy can be measured in terms of specific cash flows. In general, the Canal makes payments to the National Treasury and expenditures in the domestic economy. There are two types of Canal payments to the Panamanian Government: those considered direct contributions and those considered indirect contributions.

**Direct contributions to the State:** These consist of direct payments made by ACP to the Treasury of the Republic of Panama for:

- The resultant multiplying effect that creates secondary demands in the local economy.
- Surpluses or profits available for distribution once the Canal operating, investment, modernization, and expansion costs are covered, as well as the necessary reserves provided by the law and regulations.
- The fee per net ton or its equivalent,

charged to vessels transiting the Canal that are subject to the payment of tolls.

- The rate for the supply of utilities.

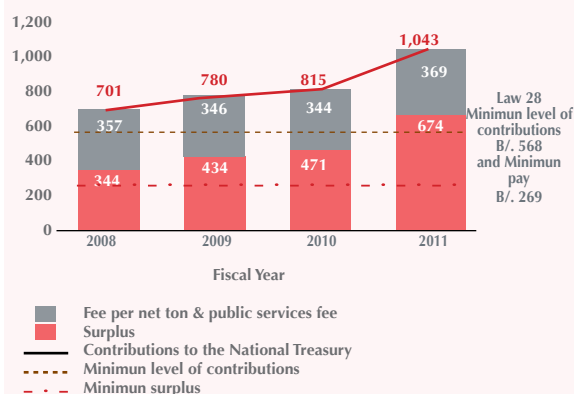
The payments of a fee per net ton, utility rates, and surpluses represent significant direct contributions to the Central Government. These flows contribute in a very important way to the economic growth of Panama, and translate into projects and investments in areas such as education, health, and housing, to mention only a few.

The graphic at the end of this page shows the total direct contributions to the State since the Canal has been administered by Panama, as well as their trends.

**Indirect contributions to the State:** These involve employee income tax withholdings, payments of Social Security dues (which include the employer portion and workmen's compensation), and Educational Insurance payments (covering both the employer as well as the employees' portion). The amount of direct and indirect contributions to the Government constitute the entirety of the payments made by the ACP to the State.

### DIRECT CONTRIBUTIONS TO THE STATE

(in millions of balboas)



### INDIRECT CONTRIBUTION TO THE NATIONAL TREASURY – FY 2011

(in millions of balboas)

Income Tax	B/. 52.6
Social Security	75.5
Educational Insurance Tax	9.1
<b>Total</b>	<b>B/. 137.2</b>

### OTHER CONTRIBUTION TO THE NATIONAL ECONOMY – FY 2011

(in millions of balboas)

Net salary paid to Panamanian Employees	B/. 294.5
Purchase of goods and services to local vendors	394.6
<b>Total</b>	<b>B/. 689.1</b>

Direct expenditures in the domestic economy: Aside from the payments or transfers of funds to the State, the Panama Canal also makes expenditures in the domestic economy, among them: the payment of the net wages of Canal employees (the gross wages after income tax and Social Security deductions), the local procurement of goods and services (including purchases solely from companies registered in Panama), and payments to contractors (consultant services) in Panama.

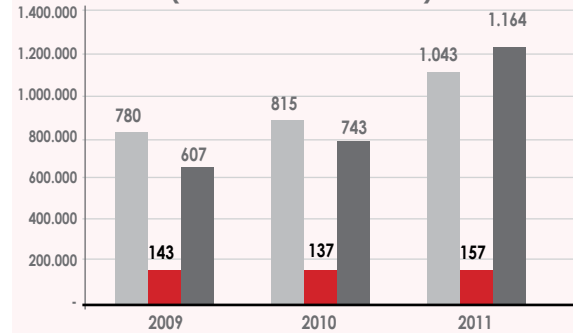
The multiplying effect: In addition to the payments or transfers made to the State and the expenditures made in the local economy, there is another effect. The payments or transfers to the State are used by the Government for several purposes, such as payroll payments, social programs and the purchase of goods and services in the Panamanian economy, among others, which generate secondary demands in the country. The expenditures made by the Canal in the local economy (for example, through the net wages paid to its employees), circulate in the economy and also create secondary demands for other goods and services. In turn, all this additional economic activity generates more income tax payments, as well as sales and import tax payments. All these additional effects are known as the "multiplying effect." In an economic impact study made in 2006, it was estimated by means of various methods, that the multiplying effect of every US\$1 paid by the Canal is of approximately 1.3.

Among the ways the Panama Canal contributes wealth to the country, there are:

- The exportation of services: The Canal income comes from its users. As such, they constitute part of the total exports

### CONTRIBUTIONS TO THE NATIONAL ECONOMY

(in millions of balboas)



■ Direct Contributions ■ Indirect Contributions ■ Expenses in the economy

of the country, and are the driving force of Panama's national economic growth and job generation, along with investments, the use of technology and employee training.

- The economic activities driven by, and depending directly, on Canal traffic (such as shipping agents, ship bunkering), or are located in Panama due to the international competitiveness provided by the country's location, such as the ports, the Colon Free Zone, the railroad, and others.
- Other activities indirectly connected with the traffic through the Canal, which benefit from Panama's US dollar driven economy, tax incentives, and / or special laws (such as the Marine Merchant Registry, the banking center, legal services) that are increasingly interrelated.

This interrelation of industries and enterprises that benefit indirectly from the Canal traffic creates an economic synergy that generates a multiplying effect derived from the original income from Canal traffic, and increases the local competitiveness with respect to other areas of the world.



# CONTRIBUTIONS

## to education and culture



*Cultural Summer Eve, 2011.*

In fulfilling its commitment with the mission of contributing to the welfare, development, progress, and the improvement of the quality of life of all Panamanians, the Panama Canal reaches out to the community with programs that assist in promoting of the education of children and the youth, by emphasizing the cultural aspects that define the country of Panama.

To know and live with the Panama Canal is a goal that thousands of young Panamanian students achieve through the "El Canal de Todos" ("The People's Canal") and "Jóvenes Líderes" ("Young Leaders") programs. During their stay at Canal facilities, information is provided to these two groups about the operation of the interoceanic waterway. As part of both programs, these students enjoy the

unique experience of going on a partial transit of Miraflores Locks, and become Canal ambassadors when they return to their communities and share their experience and information about the Canal. During Fiscal Year 2011, 159 young people from all over the country participated in the Young Leaders program, while 8,675 students participated in The People's Canal program.

An instruction program is open to another group of students by means of tours conducted on an information bus. These tours are oriented toward schools in locations that are difficult to reach, as well as to university centers. The information bus travels throughout the country and has visited a total of 12,779 students.

The ACP complements its efforts at sixteen

Panama Canal information centers with technological facilities where communities may conduct school work or participate in courses, as well as other educational options organized at each center. A total of 1,490 courses have been offered at these centers, with the participation of 177,571 Panamanians who use the facilities to stay abreast of technological advances.

In 2011, to keep the Panama Canal connected with all Panamanians the ACP made inroads in the Twitter, Facebook, Flickr, YouTube, and LinkedIn social networks, and has created important links to share precise information on the Canal.

Its participation in fairs and similar events during Fiscal Year 2011 allowed ACP to

share with the audience details on the operation of the Canal and the Expansion Program. These events are also windows of opportunity for Panamanian artisans who appreciate the Canal's support in promoting Panamanian crafts.

Artistic performances and musical displays were enjoyed by audiences in Panama during the 2011 Summer season. More than 100,000 persons attended unusually magical and fun events in Colon, Las Tablas, David, and Santiago, provided by a new generation of Panamanian artists.

The Panama Canal has thus become an exporter of knowledge and experience in support of the country's growth.



*Students make a tour through the locks, on board the Atlas School boat.*

## THE VALUE of the route



The Panama Canal route presents itself as an asset of increasing value, not only because of the transit services it provides, but because of the connectivity and savings in distance and time that translate into a better utilization and profitability of the vessels for shipping lines. The decision about what route to take depends on various factors with an impact on transportation costs, such as those of fuel prices, daily ship leasing costs, ship construction costs, provisioning costs, voyage time, and the cost and relative reliability of the various alternatives. The Panama route, being the shortest, allows a better ship rotation. In addition, the existing port facilities at both ends of the Panama Canal allow shippers to use Panama as a regional cargo collection and distribution center, and results in a

better utilization of the capacity of the ships and more profitability.

The success experienced by the Canal has been achieved precisely because of the value the Panama route represents for shippers, from which direct and indirect economic benefits and a multiplying effect on the Panamanian economy have derived. The Panama Canal becomes a source of currency for Panama by exporting services that generate an income from its users. These services are, in turn, part of the total exports of Panama and, along with investments, the use of technological applications, and the training of its employees, constitute a driving force for national growth and job generation. Due to the success achieved by the Canal, they have become a direct source of additional economic activities that



depend on Canal traffic, such as shipping agents and the companies that provide bunkering, or businesses that establish themselves in Panama to take advantage of competitiveness resulting from Panama's geographic location and its ports, the Colon Free Zone, and the transisthmian railroad, among others.

Likewise, the Canal has become a source of benefits for other activities indirectly connected with Canal traffic, such as the merchant marine registry, the banking center, and the suppliers of legal services, whose economy is increasingly interrelated. The link between industries and companies benefiting indirectly from Canal transits creates an economic synergy that creates

a multiplying effect from the original transit revenues and increases the local competitiveness relative to other areas of the world. This logistical and economic conglomerate produces an efficient and competitive environment for various types of commercial activities to facilitate trade at all levels. It includes the services provided to vessels, transportation, and cargo services (handling, warehousing, consolidation, distribution, customs processing, and freight forwarding), as well as financing facilities. As a complement, logistical services with an aggregate value such as retail and wholesale businesses, that include, among other operations, the intermediate processing, mixing, assembly, and personalization of goods.



# FAIR BUSINESS PRACTICES

## in the value chain



The contracting system is a valuable tool to communicate and promote Canal corporate values with concrete actions, particularly for the practice of transparency and honesty.

The Online Tenders' system is the portal used by the Panama Canal to disseminate information and receive price offers for procurement and invitations to bid. It has been designed to provide information to suppliers throughout the world, 24 hours a day.

In Fiscal Year 2011, the Panama Canal advertised approximately 10,000 purchases and invitations to bid, and received 33,000 proposals.

In addition to Tenders Online, as part of

its accountability and in order to keep its transparency, the Canal maintains a simple, debureaucratized system for bid protests that is easy to use by suppliers, who may protest against the procurement or bidding process if they consider it biased or objectionable for any reason; against disqualification, if they consider it unduly issued; and against a contract award, if they consider that it did not comply with the bid request, procedures, or regulations.

Despite the ease with which this right is exercised, only 0.25% of the awards have been protested in the last two years, which confirms the trust the suppliers have in the system. Almost 40% of these protests have been decided in favor of those who used it to appeal, proving that it results in an

effective review and reconsideration of the facts of the protest.

The fair business practices in the value chain stem from the ACP Organic Law, which establishes that contracting shall be based on the promotion of the best open competition, and a reasonable flexibility of designs and specifications, in order to promote contractor participation, impartial decisions, and the equitable treatment of contractors.

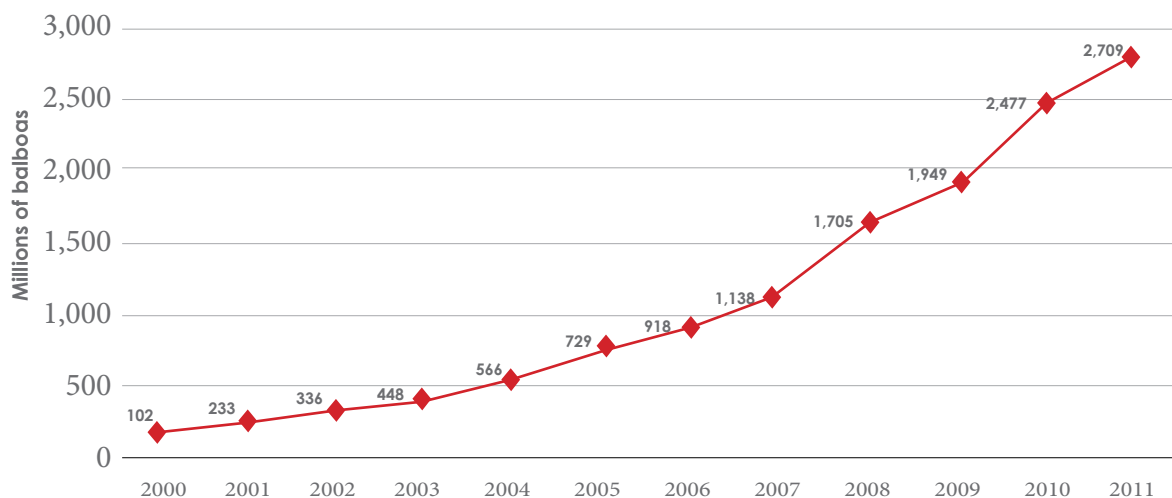
In complying with these guidelines, the ACP Acquisition Regulations forbid ACP employees to abuse the authority delegated upon them. These regulations also establish the obligations of suppliers and contractors, and dictate that the latter possess rights the Authority must respect. These include the right to be treated respectfully and equitably,

to file claims, to be compensated if justified, and to receive the payment agreed upon in a timely and unconditional manner.

Also in complying with these regulations, the Panama Canal recognizes that contractor workers frequently require protection, and has therefore established contract clauses for their protection. These clauses include the payment of the mandatory minimum wage, the requirement of submitting a certification of payment of Social Security dues in order to receive payment, and the Panama Canal's commitment to include, as an integral part of its strategy and its operations, ensuring and promoting among its suppliers and contractors the principles of the UN Global Compact. The ACP is bound by this Compact to protect the rights of workers and securing their fair treatment.

### PANAMANIAN BUSINESS PARTICIPATION IN PANAMA CANAL'S PROCUREMENTS

(annual accrual)







# INDISPENSABLE

## talent



Without a doubt, the men and women who make up the human capital of the Panama Canal are a key element to its operation, and they constitute one of its main competitive advantages. Hence, the commitment to the welfare of their human resource is based on integrated management that provides benefits and opportunities, enabling sustainable professional and personal growth to improve the quality of life which extends to their families.

The human capital embodies the objectives, expectations, and potential of the Panama Canal, so it is important that it have the skills required to focus on customer satisfaction and continuous improvement. Promoting the integral development of employees, seeking their welfare and taking full advantage of the benefits, by providing them with the tools, training, and confidence to achieve the objectives of the organization, are important elements in the human resource management in the Panama Canal. It is not enough to focus on hiring the best, but also giving people the capability to do extraordinary and innovative things.

Focused on the welfare of its people, the Panama Canal establishes and implements programs to ensure occupational health and safety, training, and development so that their employees may acquire a productive and innovative capacity and live the experiences they need to improve in their jobs in a productive and equitable environment,

where one works towards improving working relationships and where a good quality of life is ensured.

In the management of the human resources in the Canal is essential to ensure a balanced work-life relationship, especially when it is observed each time that the modern tendency of people is to place their interest in the search for a rewarding lifestyle and the desire to aspire to a long career in organizations.

Under these provisions, this section has been divided into five components, which describe the main programs that lead to the welfare of the human resources in the Canal and that have allowed it, twelve years after the transfer of the Panama Canal, to have a better educational level and a greater orientation towards productivity and better benefits. The programs have been grouped into the following areas: Occupational Health and Safety, Training and Development, Equity and Recognition, Labor Relations, and Quality of Life.





# OCCUPATIONAL

## health and safety



The work performed by more than 75% of the Panama Canal employees is carried out in the maritime and industrial areas, which is the reason that occupational health and safety of the human capital is critical to the sustainability of the Panama Canal. Among the programs aimed at promoting the welfare of human resources, there are several that help consolidate a culture of a healthy life, free from work accidents, injuries and illnesses associated with the activities of the organization.

The following programs are highlighted for this fiscal year:

- **Comprehensive Wellness Program Plus** (PBI+ for its initials in Spanish) for employees with moderate and severe obesity.
- **HIV and Your Future Program** aimed at behavior modification.
- **Vaccination Program** to counter outbreaks of seasonal influenza that occur in the country.
- **Medical Examinations Program** to monitor the health of employees.
- **Injury Prevention and Safe Return to Work Program** in which a total of 726 employees were attended, of which 433 were new patients. A total of 11,025 therapy sessions were held for program participants.
- **Job Strengthening Program** offered courses on various topics such

as: Prevention of Musculoskeletal Problems, Industrial Ergonomics, Ergonomics at the Office, and Care and Biomechanics of the Back.

- **Rehabilitation Program**, offered to employees who have problems with substance abuse or dependence.
- **Participation in Campaigns:** Like previous years, through different activities, support was given to the national campaigns Pink Ribbon and Donate a Drop of Blood. The Pink Ribbon Campaign, in addition to impacting the social environment with employee donations of approximately B/.17,000.00, helped disseminate important information to employees about the early detection of breast and prostate cancer. Similarly, 115

employees became donors in the campaign Donate a Little Drop of Blood.

- **Health, Safety and Risk Prevention Congress:** The III Health, Safety and Risk Prevention Congress took place from April 28 to 30, 2011. A total of 422 national and international participants attended the conferences and workshops.
- **Always Alert, Always Active Program:** the new program was implemented based on the behavior for accident prevention.

As a result of developing a culture of prevention and safe work, the occupational safety index, which reflects the effectiveness in minimizing the incidence and severity of work accidents, closed at 102%, 2 percentage points above the goal which was 35.0 in severity and 1.40 in incidence.



# TRAINING

## and development



*Craft Technical Development Program and Upward Mobility Program Graduations, April, 2011.*

The Panama Canal is committed to creating opportunities so that every employee can contribute, learn, grow and advance in the organization. Training during this period was focused on the objectives and challenges of the business and its relationship to the skills and knowledge of the employees. The hours of training during this period averaged 38 hours per employee.

To promote employee training and development and in support of strategic, sustainable, and systematic training, the following programs took place with active personnel involvement:

- **Development Program for Supervisors:** developed 86 new supervisors, representing an increase of 85% of

a target total of 400 supervisors who were planned and it is projected to be completed during fiscal year 2012.

- There were 29 new participants admitted to the **Craft Technical Development Program** to be developed in different craft occupations.
- The **Upward Mobility Program** reported an enrollment of 77 employees to be developed in different craft occupations.
- 28 new participants were admitted to the **Master, Towboat Development Program**.
- To strengthen the executive profile, a new program was implemented, the **Canal Executive Leadership Program** (PLEC for its initials in Spanish). The aim is to expose them to a variety of experiences to meet present and future challenges and opportunities of the Panama Canal.



- The new **Safety Program for Supervisors**, designed to train and develop skills in Fundamentals, Communication and Management of Occupational Safety, Hygiene, and Health with an organizational approach. It began in 2011, six modules were given, and a total of 458 training instances were held that correspond to supervisors of operational areas.

Within the framework of Corporate Social Responsibility, courses were given to members of the National Naval Air Service on Resource Management for Command Bridges. An operations tour aboard the towboats was also held for students of the First Course for Patrol Boat Commanders. As in previous years, the Canal maritime training crossed borders to provide training to pilots in Brazil, Uruguay and Chile.

At the end of fiscal year 2011, as support for Canal employees, 950 educational reimbursements were granted related to funds invested in their development and professional training.

The **Academic Excellence Program (PEXA)** (for its initials in Spanish), takes advantage of the Third Set of Locks Project and a variety of operational and investment projects carried out by the Canal to provide students with an excellent academic performance the opportunity to have contact with the reality of professional practice, supporting their professional growth and developing

their skills to increase the chances of obtaining jobs in the future. This year 120 students attended, exceeding the target of 100 by 20 participants. The goal for fiscal year 2012 for this program is 100 participants.

FY 2011 ended with 11% of the workforce who still have studies lower than high school education (twelfth grade), which is 1% lower compared to the percentage at the end of FY 2010. The purpose of the **Academic Leveling Program** is to provide the opportunity for employees to complete their studies, and it has two components:

- **Teacher at Home (Maestro en Casa)** gives the opportunity to employees who have not completed first through ninth grade, to opt for a middle level diploma endorsed by the Ministry of Education (MEDUCA). In April 2011 the first graduation was held of employees who received a certificate for General Basic Education awarded by MEDUCA and others received a certificate of Academic Leveling. This program currently has 75 participants.

- **Tecno-educate-me (Tecnoedúcame)** gives employees the opportunity to complete tenth to twelfth grade obtaining a Comprehensive High School Diploma (Commerce, Science and Letters) granted by MEDUCA. This program began in May 2011 and the year closed with 231 participants.

# EQUITY and recognition



Equal opportunity is promoted within the organization and all employees and applicants for employment are treated without discrimination based on sex, race, age, religion, marital status, political ideology, and physical or mental disability. Likewise, employees are free to air their general problems, concerns or complaints without fear of reprisal in order to seek a speedy solution through the complaint process.

The competitive advantage of the Panama Canal is directly dependent on people from different backgrounds, experiences, and perspectives who are valued for their unique contribution, as we work continuously to achieve a culture where all employees feel respected and included.

This fiscal year showed an increase in the recruitment of women in positions of linehandlers and in positions where there had been no prior participation of women, such as Nautical Equipment Mechanic in Training, Electrical Worker and Pest Control Worker. In turn, 27% of the total Executive and Managerial Team positions and 11% of all middle management positions is occupied by women.

## WOMEN IN NON-TRADITIONAL POSITIONS

Year	No. of Women	Increase
2005	84	
2006	89	+5
2007	97	+8
2008	123	+26
2009	124	+1
2010	126	+2
2011	141	+15

For the year 2011, the increase has been in linehandler positions and others here they had participated previously such as Nautical Machinery Mechanic, Electric worker and Pest Control worker.



Similarly, during FY-11 a new generation of 14 counselors was identified and developed on equal opportunity topics. They can provide counseling and guidance at their job sites on issues of equity and discriminatory factors, contributing towards the modeling of good labor practices and corporate values of the company.

To consolidate a culture of high performance, the ACP values, encourages and rewards properly, which involves assessing correctly and transparently. In addition to managing performance evaluation through the recognition program, the Canal awarded its employees with 4,094 On-the-Spot Awards, 789 Special Act Awards, 559 Safety Awards, 1,690 Years of Service Awards and 1 Distinguished Service Award.

The Rodolfo Lammie Excellence Award is granted annually to recognize the characteristics of a visionary, innovative, and entrepreneurial collaborator, with leadership and great human qualities.

During the month of August of fiscal year 2011, the fourth study was completed on organizational climate, achieving 82% of workforce participation, which represents an increase in employee participation in these types of studies compared to previous years. The results will be the basis for future initiatives in the management of human resources.

#### DISTRIBUTION OF MEN AND WOMEN BY SUPERVISORY POSITION

Year	Level of Supervision	Men	Women	Total
2009	Executives/Managers	79	24	103
	Supervisors/Leaders	899	108	1,007
	Non Supervisory	7,451	1,139	8,590
	Subtotal	8,429	1,271	9,700
2010	Executives/Managers	82	26	108
	Supervisors/Leaders	948	120	1,068
	Non Supervisory	7,448	1,135	8,583
	Subtotal	8,478	1,281	9,759
2011	Executives/Managers	87	32	119
	Supervisors/Leaders	946	114	1,060
	Non Supervisory	7,691	1,184	8,875
	Subtotal	8,724	1,330	10,054



# EMPLOYEE rights



Freedom of association is a human right, as defined in international declarations. At the close of fiscal year 2011, 91% of the workforce belonged to one of the six bargaining units recognized by the ACP, each with their respective exclusive representative.

During the year the Canal continued to promote the fulfillment of its strategic objectives, through the conciliation of employee and management interests, within the framework of the special labor regime. For these purposes, conflict resolution at the lowest level of supervision is promoted at the managerial and supervisory levels as an objective which is worked on continuously.

In addition three resolved labor practices were reported by agreement between

the parties, twenty-three (23) informal complaints and nine (9) formal complaints regarding conditions of employment were resolved by the intervention of the Corporate Labor Relations Section, and fourteen (14) requests for intermediate negotiation failed to result in disputes, also supported by the intervention of the Corporate Labor Relations Section.

At the end of fiscal year 2011, the Labor Welfare Performance Index closed at 128%, 28 percentage points above the established goal. This index measures and manages the recognition of work performance in an environment where labor issues are resolved at the lowest levels in the organization, directly impacting the perception of the organizational climate.

The Employer-Labor Council, which includes a representative from each of the recognized bargaining units, is the main forum in which workers and management can work together for the common purpose of contributing positively to the mission of the ACP. It held the twelve sessions scheduled for fiscal year 2011.

Sustaining a work environment conducive to the achievement of

goals and objectives is a key factor in the management of Human Resources. In addition to the formal mechanisms of dispute resolution as provided for in the collective agreements, the ACP successfully incorporated into four of the agreements that make up 97% of workers covered by bargaining units, an alternative dispute resolution method for resolving complaints affecting employment conditions, which is based on mediation. With this innovative approach, workers who believe that their complaints have not been resolved to their satisfaction by their supervisors, may request the intervention of a mediator to seek a consensual resolution to their claim at a still early stage, thus preventing waste of time, money, and effort on both sides, or take the complaint to the formal decision-making stage.

#### TOTAL EMPLOYEES BY BARGAINING UNITS

Non Professional	8,303
Professional	159
Marine Engineer	178
Towboat Captain and Mate, Towboat	194
Firefighter	65
Pilot	275
<b>Total</b>	<b>9,174</b>



## QUALITY of life



The organization is committed to maintaining a supportive work environment and facilitating the balance that must exist between work and personal life. In addition to the Occupational Safety and Health programs, during fiscal 2011 activities aimed at providing well-being to employees and their dependents continued.

Recreational and physical activities, such as aerobics classes, pilates, yoga, guided walks, volleyball and basketball games, synchronized swimming, golf and soccer, among others, were well attended. The participation of 4,270 collaborators was registered within the home leagues for volleyball, basketball, soccer, softball and golf clinics. The Interdepartmental Olympics were attended by 897 employees between

athletes and cheering spectators. The traditional Happy Summer was attended by 450 children and youngsters, children of employees, and 325 youngsters enrolled in swimming lessons.

The benefits package the Canal offers its workers includes Medical and Accident and Life Insurance, and the ACP covers 100% of the basic plan.

Parents or guardians of people with disabilities are eligible for the **Administrative Leave Program for Parents or Guardians of Persons with Disabilities**. This entitles them to 144 hours of administrative time without charge to leave each calendar year to take them to their medical appointments and required



treatments. Currently, 35 employees are enrolled in the program.

The **Financial Wellness Program** has offered lectures, individual counseling and interventions so that employees may keep their personal finances in good condition, which results in improving their quality of life.

In fiscal 2011, a total of 146 employees who reached retirement age availed themselves of the **Retirement Benefits Program**.

#### FINANCIAL WELLNESS PROGRAM

	2010	2011
Lectures	56	65
Attendace at the Lectures	1,838	1,918
Participants in the Financial Wellness Program	200	333

#### RECREATIONAL AND PHYSICAL ACTIVITIES

	2010	2011
Participants in Interdepartmental Olympics	897	897
Participants in Happy Summer (Activity for dependents between the ages of 4 and 17)	346	450
Swimming courses for dependents	324	325
Government/Institution Leagues	13	6
National Sporting Events	5	4

#### EMPLOYEES BY TENURE

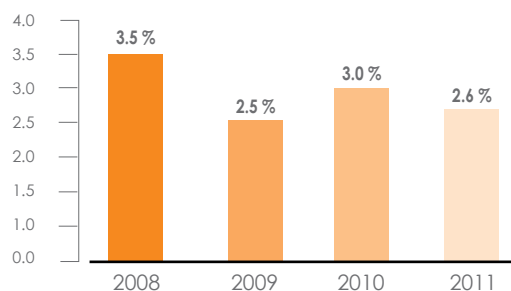
WORK FORCE	2009	2010	2011
Permanent	8,152	8,175	8,404
Temporary	1,548	1,584	1,650
<b>Total</b>	<b>9,700</b>	<b>9,759</b>	<b>10,054*</b>

(\*The increment in the labor force is due to the different operation and investment projects.)

#### AVERAGE YEARS OF SERVICE IN FY-11

Category	Average Years
<b>Special</b> (maritime and technical occupations that require a degree of professionalism, such as canal pilots; master, towboat; firefighters, among others)	16.2
<b>Manual</b> (journeymen and workers in general)	
<b>Non-Manual</b> (analysts, engineers and office workers). Professional (specialized personnel whose skills allow them to advise the institution, participate in the decision-making process, among other functions), and Managerial (executive managers and section managers)	13.3
	13.5

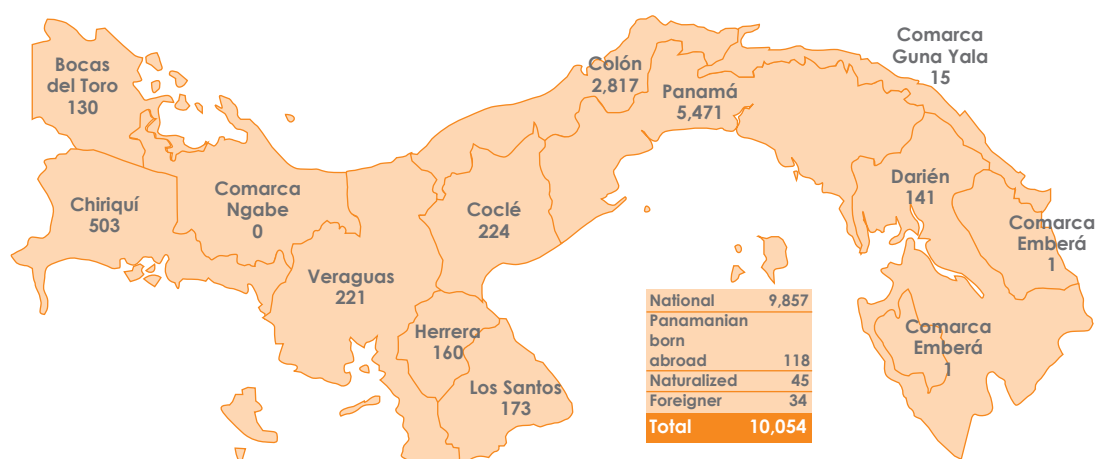
#### TURNOVER ANNUAL RATE



# LABOR FORCE

## statistics

### EMPLOYEES BY BIRTH PROVINCE



### EMPLOYEES BY EDUCATION LEVEL

	Men	Women	Total
PH Degree	17	8	25
Master's Degree	757	505	1,262
Bachelor's Degree	1,894	466	2,360
Incomplete Bachelor's	692	157	849
High School	4,270	191	4,461
Incomplete High School	1,090	3	1,093
Unavailable	4	-	4
<b>Total by Gender</b>	<b>8,724</b>	<b>1,330</b>	<b>10,054</b>

### INSTANCES TRAINING BY AREA

Area	FY-09	FY-10	FY-11
Maritime Training	2,661	2,253	2,357
Industrial and Safety Training	8,505	11,398	13,011
Professional Development Training	17,737	17,552	19,877
<b>Total Training Instances</b>	<b>28,903</b>	<b>31,203</b>	<b>35,245</b>



# VITAL alliance

---





Environmental well-being is the pillar that guarantees the quality of life of the inhabitants of the Watershed and the sustainability of the hydric resource, an essential component for the provision of water to more than half of the population and the Canal operation. In this regard, the ACP is governed by a constitutional mandate to protect the water resource through an integrated management of the Panama Canal Watershed. In this way, the ACP assumes the challenge of being an environmentally sustainable company, combining human talent and tenacious teamwork focusing in the operation where people and environment form an indivisible unit.

For the preparation of this report, we have divided the socio-environmental management in components that link aspects from the sustainability of the Panama Canal Watershed to the responsibility in social and environmental attention in the development of engineering works for the Canal Expansion Program.

Thanks to the reforestation programs and to the implementation of environmental economic incentives in the communities, that promote an adequate management of natural resources, we have achieved a positive evolution in the recovering of the forest cover and living conditions of the people in the Watershed. The Panama Canal is conscious that through education about water resources protection and the strengthening of the persons living in this Watershed, we shall be able to establish a sustainability culture.

It is within this context, and conscious of the importance of reducing the greenhouse

gas emissions at a worldwide level, the Canal addresses its efforts to become a low carbon organization. The all-water route through Panama makes the Canal, from its construction, the worldwide maritime "Green Route," contributing to fuel savings for vessels using it, therefore, reducing the CO<sub>2</sub> emissions from these vessels. Water issues such as quality and quantity are being considered, and the way in which an application of a scientific management of water reduces water purification costs. In aspects related to corporate performance, it reflects the compliance with environmental standards; moreover, the organization promotes the culture of cleaner production in its operations based in the monitoring and permanent enhancement of its processes. Without losing the sight as a whole with other preceding aspects and components, the Canal Expansion Program is an expression of corporate values based in transparency and accountability, and the way in which each encumbrance is handled complying with the highest environmental and social standards.



# CONSERVATION

## of the panama canal watershed



The Panama Canal Watershed has divided its 345 thousand hectares of extension in eight work areas, established under hydric criteria. With this organization, the environmental strategy of the ACP integrates social, economical, and environmental aspects, strengthened by an interinstitutional coordination and strategic alliances to achieve the connectivity and continuity of the community fabric and productive activities.

The ACP promotes hydric resources integrated management of the Watershed to assure its availability in quantity and quality, creating confidence in the national and international community thanks to the continuous operation of the services it offers and for its focus of a participative and

integrated management together with the interest groups.

The Interinstitutional Commission for the Panama Canal Watershed (CICH, for its Spanish acronym) is the bond for the implementation of the environmental strategy. The CICH integrates efforts, initiatives, and resources for the conservation and management of the Watershed and promotes its sustainable development. Through the CICH, strategic alliances are performed and a community participative structure is established for the implementation of environmental programs and water governance.

From the year 2002, the ACP executes the



**Surveillance of the Vegetation Cover and Uses of the Soil Program** in the Watershed, that every five (5) years generates the Vegetation Cover and Uses of the Soil General Map of the Canal Watershed. In this map it is quantified the distribution of the vegetation cover of the Watershed, the deforestation rate is established, and the pressure on natural resources is indicated. In the Panama Canal Watershed exists six (6) protected areas that occupy 38.5% of the territory (around 1,309 Km<sup>2</sup>).

Based on comparisons of the vegetation cover in the Watershed, for the period 1985-2003, the deforestation rate was of 0.05%. For the period 2003-2008, deforestation decreased and a process of equilibrium started where the loss of annual forest (approximately 75 hectares) was recovered due to the reduction of wood cutting, the natural regeneration process, and reforestation programs carried out by State institutions, communities, and the private enterprise. These results show a favorable tendency in the conservation of the forests of the Canal Watershed of 0.06%.

Based on a five-year schedule, for the year 2012, we expect to update the information corresponding to the period 2008-2012.

The **Environmental Economic Incentives Program** (PIEA, for its Spanish acronym) promotes good production practices

through the development of sustainable environmental businesses in the Canal Watershed.

Through this program, 600 producers have benefited with increased yield production when using the planning model of farms that the program establishes. As an estimate, PIEA has benefited 2,180 persons in 50 communities through the positive transformation of its agro environment surroundings.

An indispensable requirement to participate in the PIEA is owning a property title on a piece of land. In the year 2011, a total of 800 property titles of the Corregimiento El Cacao, District of Capira, were registered in the Public Registry, as a result of the **Cadastre and Land Titling Program**. This program aims at searching for legal certainty in the owning of land, which promotes the well-being of the residents of the area. To date, 1,490 property titles have been granted.

#### CURRENT AND PROPOSED HECTARES IN THE PROGRAM

	Ha. 2009	Ha. 2010	Ha. 2011	Ha. 2012	Ha. 2013	Total (Ha.)
Continuous areas	185	250	50	-	-	485
Agroforestry	300	320	400	500	500	2,020
Silvopastoral	162	499	600	700	700	2,661
Commercial		609	111	200	200	1,120
Natural regeneration		-	-	270	289	559
Forest enrichment reforestation		155	-	-	-	155
<b>subtotal (Ha.)</b>	<b>647</b>	<b>1,833</b>	<b>1,161</b>	<b>1,670</b>	<b>1,689</b>	<b>7,000</b>

# ENVIRONMENTAL

## sustainability culture



Sustainability culture refers to a set of positive values that enables an amicable relationship with nature. For this purpose, planned processes have been developed in the Watershed that are directed towards initiatives for the protection and conservation, on an on-going basis, and in coordination with all the players involved in the integrated management of the territory.

As part of this process, a 25-year term Master Plan was established that will facilitate a set of well-sequenced and concerted actions denominated Sustainable Development Plan and Integrated Management of the Canal Watershed (Plan DS-GIRH, for its Spanish acronym). From its inception in the year 2007, the results of the implementation of the plan have been satisfactory. As of 2011, it has facilitated the execution of 89

projects with the participation of different governmental, non-governmental institutions, and communities in which most of the investment has been concentrated in community infrastructure projects that improve significantly the quality of life of the Watershed population.

In the ACP, the co-responsibility with populations and water governance approach is based in the fact that environmental management can only be sustainable if it is participatory. That is why; local committees or watershed committees were created as community organizations that facilitate the planning and execution of actions, programs, and projects in the different sub-watersheds, under the principle of shared responsibility in the conservation of the water resource.

For the year 2011, the participatory process is consolidated in the management of the East Sector Watershed and the Advisory Council of four sub-watersheds (4S) in the West Sector was established. This has facilitated the participatory monitoring of the Watershed as a water governance factor in seven (7) work areas.

The **Skills Strengthening Plan** contemplates training local committees, teachers, and students. During environmental educational journeys, 263 teachers and 5,593 students from 110 Watershed schools benefited from these journeys. The **Watershed Guardians Program** stood out with the second version of environmental journeys favoring 106 educational centers, 10,000 students, 1,200 teachers, and 47 local committee representatives. Besides, four student leadership regional meetings were held with the participation of 200 students and 20 teachers, among other activities.

The **Environmental Conservation and Work Training Program** is performed in strategic alliance with the National Institute of Vocational Training for Human Development (INADEH, for its Spanish acronym) and the Ministry of Education (MEDUCA). Said program facilitates the insertion of the Watershed population in the labor market, at the same time that it develops environmental good practices modules and raises public awareness among the community. It has been implemented in more than 60 educational and community centers of 23 sub-watersheds of the Panama

Canal Watershed and offers training such as functional English, brickwork, electricity, and computers. During the six years from its execution, more than 4,721 youngsters have benefited from the training and around 8,740 certificates have been handed over.

Sustainability culture includes the prevention of risk to reduce vulnerability of the population and incorporates programs that enables its adaptation to extreme climate phenomena that could compromise personal and community security. It is within this context, that the ACP has as a goal to reduce the vulnerability of social and natural systems of the Panama Canal Watershed to adverse impacts of climatic change and to risks related to global warming, to increase the capacity of recovering both systems and diversify their means of livelihood.

In 2011, studies oriented towards the creation of capacities to cope with climatic changes were performed. The main results of these studies include the analysis of the precipitation registry and the definition of the theoretical framework for the characterization of its climatic threat. Furthermore, the socio-economical vulnerability baseline of the Watershed was prepared. Likewise, vulnerability maps used for the analysis of floods and droughts were created, and its spatial distribution throughout watersheds and sub-watersheds. Finally, the relationships established between climate and socio dynamics established in the Watershed were identified, which has enabled the establishment of lines of action for the definition of the programs with the communities.



# THE GREEN route



Consistent with its strategic vision, the ACP is taking actions to contribute with the reduction of greenhouse gas (GHG) emissions.

The Third Set of Locks will allow the transportation of greater cargo volumes using less vessels, therefore, reducing the consumption of fuel and carbon dioxide emissions (CO<sub>2</sub>), which will contribute with international efforts to reduce global warming. For this reason, the ACP is

implementing a module of CO<sub>2</sub> emissions for the shipping industry, which will allow the calculation of CO<sub>2</sub> emissions for worldwide trade routes. Moreover, it will quantify emissions of the Canal route, current and expanded, which will reduce more than 160 million tons of CO<sub>2</sub> in its first 10 years of operation.

The ACP will implement a comprehensive plan in the management of carbon that includes the development of a

baseline of GHG for its operations and the establishment of a strategy for the reduction and compensation of carbon. The ACP seeks to mitigate the impact of its activities by reducing its carbon footprint in a proactive way, through the execution of reforestation projects and the recovering of degraded areas that could generate in carbon credits.

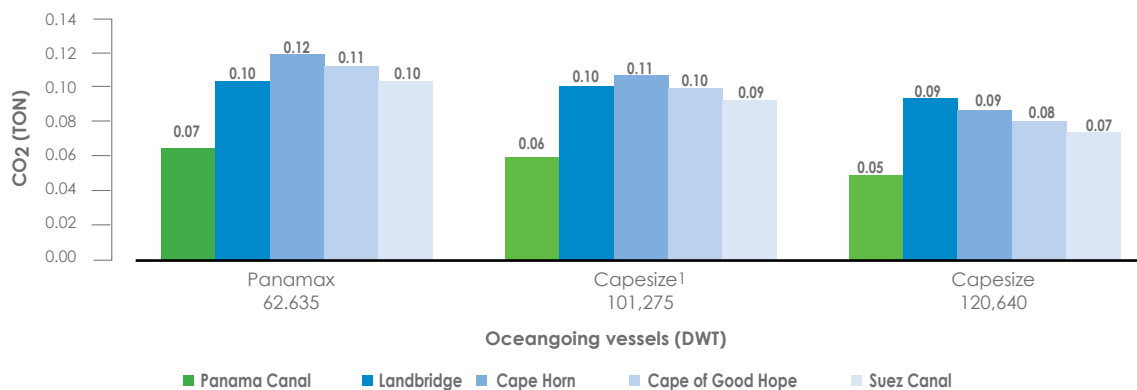
Under a voluntary carbon standard, the ACP will certificate its reforestation programs and sustainable models of production, in keeping with the PIEA. The carbon standard is a combination of actions that are being carried out to increase the quality of life of the communities, the conservation of biodiversity of the Watershed, and the mitigation of GHG emissions. It is expected to monitor and to sell those credits in the carbon market, with which we may obtain new resources to replicate the model in other areas of the Watershed,

which, in producing rates of return, will contribute to the financial sustainability and a lesser environmental impact.

Under this statement, the ACP considers the integration of compensation mechanisms, such as REDD (Reducing Emissions from Deforestation and Degradation) for the protection of forested areas through which millions of tons of CO<sub>2</sub> is being mitigated in the areas with forest cover in national parks such as Chagres, Soberania, and Camino de Cruces.

To that respect, it is expected that the Panama Canal Expansion project could qualify as Nationally Appropriate Mitigation Actions (NAMA), that will contribute to the reduction of greenhouse gas emissions in the planet, especially CO<sub>2</sub>, when offering maritime trade the alternative of transporting great volumes of cargo through a safe and efficient, both in time as in costs, all-water route.

### CO<sub>2</sub> TONS PER CARGO UNIT



<sup>1</sup>Capesize: These vessels mostly use the Cape of Good Hope and the Cape Horn routes. These vessels are over 90,000 DWT and do not transit the Panama Canal.

# QUALITY

## and quantity of water



The ACP manages the Watershed hydric resources to guarantee availability of water for the consumption of the Panamanian population, the operation of the Panama Canal, and the generation of electric power. It is responsible for several programs and systems, such as forecast, maintenance, prevention, production, and distribution of drinking water and chilled-water for air conditioning.

From the superficial hydric balance for the Panama Canal Watershed, for a period of 11 years (2000-2010), it was estimated that the available water is of 5,125 millions of cubic meters (Mmc). From this, 358 Mmc were used for human consumption by means of the water treatment plants in Chilibre, Monte Esperanza, Sabanitas, Miraflores, Mendoza, and Laguna Alta, that

represents 7% of the total. Regarding hydroelectric generation, 1,547 Mmc were used representing 30%, and for the transit of vessels 2,512 Mmc were used, which represents 49% of the total. Due to lack of capacity of the Gatun Lake, 708 Mmc of excess water was disposed of which represents 14%. The latter implies an integrated management of the hydric resources to guarantee quality and availability, including situations of extreme events, as a result of weather phenomena.

In order to face these events, the Panama Canal relies in the **Flood Control Program** that was tested on December 7, 8, and 9, 2010, when "La Purisma" storm impacted the Panama Canal Watershed causing the discharge of 153,000 cubic



feet by second of water through the Madden Dam. As part of the community risk management, the population was evacuated to other locations previously identified.

The Surveillance and Follow up of the Quality of Water in the Panama Canal Watershed gives special attention to the quality of drinking water produced by the water treatment plants under the ACP administration, such as Miraflores, Monte Esperanza, and Mendoza. In addition, to natural waters in stations located in tributary rivers and reservoirs in Gatun, Miraflores, and Alajuela, to waste waters, participating in the follow-up of the characteristics and monitoring of different discharges of waste waters generated from ACP operations. With the implementation of this program, more than 30,000 samples were analyzed, including analysis to metals, organic compounds, pesticides, cyanobacterias, protozoa, and other biological indicators.

Through the water treatment plants under

the ACP administration, drinking water is provided to approximately 0.5 millions of inhabitants who receive this benefit from the Provinces of Panama and Colon. With the Mendoza Project, which has a current production of 26 millions of gallons per day of drinking water and with a production capacity of 40 millions of daily gallons we were able to supply drinking water, on an on-going basis, to 125 thousand recipients that had to wait 15 years for this vital liquid.

In January 2011, the ACP undertook the rehabilitation of the Chilibre water treatment plant when the plant was about to collapse due to the turbidity caused by La Purisima storm. The ACP improved all the processes of the plant including electrical and mechanical installations. Once an agreement was reached with the National Aqueducts and Sewer System (IDAAN, for its Spanish acronym) and the contractor company for the rehabilitation of the Chilibre plant, the ACP assumed the role of supervising agency to monitor the appropriate execution of this agreement.



# CORPORATE

## environmental performance



The Panama Canal measures the environmental performance through the Corporate Environmental Performance Index (EPI) that is established as a measure of the efforts of the organization in applying good practices and environmental regulations to its activities in general. The EPI includes the following components: training, compliance with standards, environmental investment, emissions, effluents, water quality, and forest cover.

For the environmental responsibility training, 11 courses were offered with an attendance of 387 employees. Additionally, 60 environmental inductions were given to 720 collaborators in the shops on the standard regarding solid waste disposal, and

20 courses of energetic efficiency to 270 employees.

Environmental investments represent the budgeted amount of the projects addressed to environmental protection of Canal facilities (e.g., erosion control, slopes stabilization, among others). Five hundred million dollars were invested in projects of which 185 millions are projects that have environmental components of the amount of the annual investment, without including the expansion program.

The Panama Canal measures the emissions from its vehicle fleet. Ninety-four (94%) percent of vehicles comply with the standard on motor vehicle emissions used

by the ACP. Those vehicles not complying with standards are sent for a check-up and before they go back to the streets they should comply at a 100% with standards.

The monitoring of emissions from vessels was performed for the first time in the year 2011, and it was determined that the content of sulfur (%) in light diesel and the content of nitrogen oxide (NOx) from nine (9) vessels, four (4) tugboats, and five (5) launches comply with the established in Attachment VI MARPOL, the technical code of Nox, and MEPC103 (49).

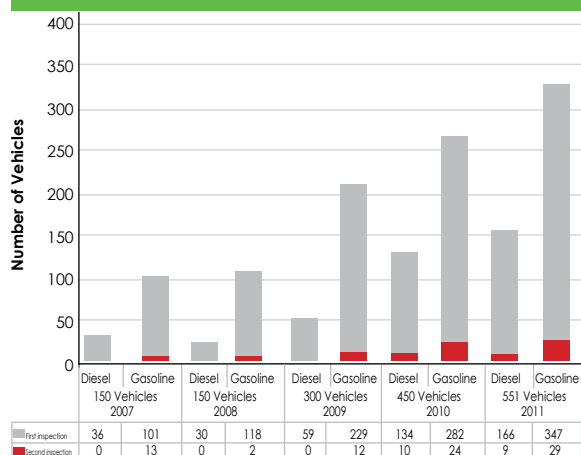
At a corporate level, ferrous waste cleaning was performed in ten operational areas, resulting in the commercialization of approximately 2,600 tons of ferrous waste and 53 tons of non-ferrous waste (aluminum, copper, and bronze). Moreover, 154,600 gallons of used oil were recollected, of which 43,600 were recycled as fuel in thermo-electrical

generation, and 111,000 gallons were handed over for commercialization.

Energetic efficiency is a relevant issue for the corporate environmental performance index. A plan was developed for the energetic efficiency management that covers the years 2011-2020, as a means for the implementation of 18 lines of action that include studies and projects. In 2011, a plan was created to gradually adopt the International Green Construction Code (IGCC) standards starting in 2012. In the areas of Corozal, Miraflores, and Pedro Miguel, 87 natural lighting devices were installed. In conjunction, that action illuminates 8,700 m<sup>2</sup> of area with natural illumination saving a total of 144,100 kWh of energy.

From the year 2006 to date, seven (7) concessions to extract logs submerged in Gatun Lake have been granted given a total of 20,200 hectares of avoided deforestation. Regarding wood, 6,665,280 cubic feet (p3) have been extracted in an area of 2,620 hectares in the last four years which represent 10% of the area with potential for extraction. This generates environmental benefits, since it increases the storage capacity and enhances the quality of water in Gatun Lake, reducing the pressure on forest resources of the area.

#### ANNUAL MEASUREMENT OF VEHICLE FLEET EMISSIONS





# ENVIRONMENTAL

## responsibility in the expansion



Four years after initiating the works of the Panama Canal Expansion Program, the ACP continues implementing, in a successful manner, environmental requirements applicable to the program. The results are visible and reflects in the excellent environmental performance obtained, which is recognized by external auditors to assure compliance with the program.

The environmental impact study, category III, that covers all components of the Canal Expansion Program, defines environmental parameters under which the works should develop. Additionally, the ACP prepares and presents, on a quarterly basis, the progress report of the Canal Expansion Program, addressed to financing multilateral agencies, giving the details of the progress

of each one of the components of the program that includes environmental management in each one of the ongoing projects. Required standards are stringent, as well as audits performed to the program by regulatory bodies previously mentioned with the result of new environmental and social standards established by the expansion program that become a reference at local and international levels.

During fiscal year 2011 reforestation was completed in a total of 565 hectares, distributed in protected areas and under the control of the National Environmental Authority (ANAM, for its Spanish acronym). The reforestation program has had a great impact at a national level, incorporating areas in the provinces of



*A paleontologist examines a possible fossil, a few meters away from the intense construction activity on the Atlantic site. The area, which was submerged for many millions of years, is rich in remains of marine animals.*

Chiriqui, Herrera, Cocle, and Panama. The goal of the reforestation program is to complete approximately the double of affected hectares, i.e., reforest 1,200 hectares. At the close of the reporting period, 18 neighboring communities and 84 families were benefited by these projects through an increase in their economical income achieved from selling seedlings from the nurseries established by the members of the community and the payment to workers that were hired to participate in the reforestation program. Additionally, these families benefited from training in several environmental issues, forestry, and community organization obtaining the improvement of their farms and parcel of land.

The excavations performed as part of the expansion program have enabled conducting investigations to explain the formation of the Isthmus of Panama that joins North America with South America. These works, carried out by the ACP by means of a contract with the Smithsonian Tropical Research Institute (STRI), have led to one of the fossil collections of utmost importance for the Tropics at the current time, enabling the rescue of more than 3,500 fossil animal remains and more than 250 fossil plant remains, all of them with ages ranking between 15 and 23 millions of years. This has generated the need to evaluate the current thesis about the age of the Isthmus and the way in which it emerged from the bottom of the sea.

Among the archaeological findings reported to date, it is worth mentioning the following: trenches used for the Canal defense belonging to the Republican era, a rifle used by the US Army during the first half of the 20th Century, structures and machinery from the time the French Canal was under construction, and ceramics remains, among others.

Activities to rescue and relocate wildlife are part of the day-to-day of the different components of the expansion program. At the present time, more than 1,964 mammals, 2,464 reptiles, 302 amphibious, and 84 birds have been rescued.

Part of the environmental commitments of the Panama Canal Expansion Program implies the carrying out of induction trainings for all the workers, in environmental and social aspects relevant to the project. To date, more than 290,160 hours of training have been given in environmental and social issues, which have resulted in a cultural change that without doubt, is one of the most important legacies that the expansion program will leave the workforce of the country. All the skills know ledges, and new ways of working, both at a technical level as from an environmental perspective, will become part of the cultural inheritance that will accompany the labor force in all the works that from now on they will perform.



American crocodile hatchlings are rescued from the locks construction project area and released in Gatun Lake. Over 3,000 animals have been rescued from the Expansion Program work sites and relocated in national parks.





# CORPORATE

## volunteer program

---





More than 120 children participated in Children the Canal Camp July 2011. They visited the Ruins of Old Panama accompanied by a group of volunteers. This activity involved a total of 3,828 hours of volunteer work during 2011.

Over a decade, the ACP has participated actively in the community and has driven several programs focused in education that contribute with the development of the country. The Canal promotes and supports activities carried out by collaborators under the Corporate Volunteerism Program.



This program, which was created in fiscal year 2008, is a multiplying factor of the efforts involving social responsibility towards the goal of sustainability. This network offers the opportunity to employees to channel their potential in benefit of society and, at the same time, to strengthen skills such as leadership, project administration, and teamwork. During the execution of the projects, the volunteer assumes the role that would bring about the commitment of the organization with society, working in some cases in alliance with non-governmental organizations (NGOs), private enterpricompanys, and governmental institutions, aiming at multiplying the scope of the projects undertaken.

The Panama Canal enhances the growth and development of its workers on an

on-going basis. **The programs Teacher at Home and Techno-educate-me** are focused in offering an opportunity for workers to continue and conclude their basic schooling. Both programs entail a key element for success, the support of a volunteer tutor. Volunteers are important for the success of the programs, since they offer not only reinforcement classes to the students, but they also become their friend that encourage them to go on, to give a step forward of effort to reach the goal. In the year 2011, volunteer tutors have accumulated a total of 3,323 hours of volunteer work.

Panama Canal volunteers not only focus their efforts in benefit of their co-workers through tutoring classes, they participate actively in programs that seek labor-familiar conciliation. The Family Seminar was held in



Corporate volunteers work on the refurbishing of the Palmas Bellas School in Torti.





A corporate volunteer examines one of the guests to the 2011 Children at the Canal Camp.

three occasions during the summer 2011, with more than 175 participants in each occasion. This seminar provides Canal employees and their families tools to achieve a balance between family life and labor life through entertaining briefings offered by corporate volunteers. A total of 61 volunteers invested 681 hours in the preparation and execution of these seminars.

The Volunteers' Network also supports ONGs initiatives that have as an objective to raise awareness in the society on different issues of general interest. Such is the case of the celebration of The Earth Hour. This initiative looks for educating the population on energy saving and global warming. In March 2011, several governmental institutions, non-profit organizations, and private enterprises joined to have a concert celebrating the occasion.

ACP volunteers were present giving their support; they invested 98 hours.

The Panama Canal Volunteers' Network recognizes the importance of education in the development of a better future for future generations, dedicating time, work, and talent to achieve better

#### VOLUNTEERS HOURS



opportunities for the students in public schools throughout the country. With this objective in mind, volunteers assumed the challenge to rehabilitate the Palmas Bellas School (basic education) located in Chepo. More than 150 volunteers identified themselves with the initiative to contribute with this community by means of the construction of four classrooms, a library, one laboratory, restrooms, and a kitchen; as well as the rehabilitation of the existent basic infrastructure. On late September 2011, corporate volunteers had invested a total of 12,796 hours, all of them in their free time. This project has had the support from the Club Activo 20-30, which has provided the volunteers with the funding for the purchase of construction material.

In addition to the projects that contribute

to the improvement of schools infrastructures, the volunteers participate also in several projects that aim at transmitting knowledge and values. They achieve this through the Children to the Canal, one of the activities with most participation of volunteers. The camp is an event that seeks the integral development of pre-adolescent students of the country. More than 200 corporate volunteers participated to make this event a reality, inviting more than 150 children from remote areas schools to spend a week-end in the City of Panama. During this camp, the children were able to get a close look at Canal operations; they visited different places of historical and cultural interest in the capital while creating friendship ties and fellowship with children of the whole country. The personal achievement message was hand-in-hand during the whole camp, which



Corporate volunteers during the celebration of the 2011 Children to the Canal get together.



*A corporate volunteer lights candles during the Earth Hour Concert, 2011.*

is planned carefully to guarantee three days of unforgettable experiences for the little guests. During FY-11, this activity represented a total of 3,828 hours of volunteer work.

The volunteers demonstrated the commitment for the protection of ecosystems through the design and application of environmental management programs implementing a culture of environmental conservation and recycling within the company.

An example of this is the Recycling Program of the Panama Canal workers that falls within the program of the 3Rs: reduce, reuse, and recycle. This program started with the recollection of two materials: aluminum cans and plastic containers. Thanks to the

acceptance received, during FY-11 started the collection of journal paper among collaborators and of cardboard from merchandise packages. Among these four materials, a total of 36.70 tons were recollected in FY-11. Together with this effort, specific recollections were carried out: of phone books and electronic waste, obtaining a total of 2.28 and 2.73 tons, respectively. Simultaneously, we continue with the effort of developing workshops and competitions to create awareness and teach the virtues of recycling both for collaborators as for teachers and students of the Panama Canal Watershed.



# AWARDS and recognitions



## **The Panama Canal Authority – one of the World's Most Ethical Companies**

The Ethisphere Institute recognized the ACP as one of the World's Most Ethical Companies during 2011 for demonstrating leadership in ethical business practices, for its code of ethics, its regulatory infraction history, its investments in innovation, and its sustainable business practices. The research-based Ethisphere Institute is a leading international think-tank dedicated to the creation, advancement and sharing of best practices in business ethics, corporate social responsibility, sustainability, and anti-corruption. (March 2011).



## **Honor Roll of Leading Companies in Central America and the Dominican Republic**

For third year in a row, the ACP was named the best Leader Company in Central America and the Dominican Republic. The ACP was ranked first according to a study conducted by SUMMA magazine and management consultant Hay Group which, in conjunction with Fortune magazine, investigate since 1997 the "World's Most Admired Companies." The study analyzes areas such as finance, operations, products and services, customer relations, social responsibility and image. (June 2011).



## **Communicator Awards**

The ACP was granted a Communicator Award in the silver category for its training videos "Advanced Maneuvers II" and "The Handling of Ultra Large Container Ships." These awards are granted annually by the International Academy of Visual Arts. (July 2011).



### Good Corporate Citizen Award

The American Chamber of Commerce and Industries of Panama (AMCHAM) distinguished the ACP with an honorable mention as part of its Good Corporate Citizen Award, acknowledging the ACP's Corporate Social Responsibility efforts in promoting the sustainability of the Canal Watershed environmental resources.



### International Consultancy Project of the Year of the Target Zero Challenge Award

CH2MHill granted the ACP the "International Consultancy Project of the Year of the Target Zero Challenge" award, for its extraordinary achievements in the area of safety. This award highlights the implementation of the safety training program for all employees and the establishment of the Safety slogan to promote on a permanent basis the importance of safety among the work force during the Canal expansion program. (January 2011).



### Topbrands, the book of the great brands in Panama

The ACP was included in the second edition of Topbrands, the book of the great brands in Panama. (February 2011).

# MEMBERSHIPS



## United Nations Global Compact

The Global Compact is a voluntary initiative for businesses that are committed to aligning their strategies and operations with ten universally accepted principles in four thematic areas -- human rights, labor standards, environment and anti-corruption.



## SumaRSE

This is a not-for-profit association that promotes the adoption of CSR as a way of conducting business and as a competitive strategy, so that companies contribute to the socio-economic growth and sustainable development of Panama.



## UNESCO - IHP

The International Hydrological Program (IHP), which is UNESCO's intergovernmental scientific cooperation program in water resources, is an instrument that allows member States to improve their knowledge on the water cycle while enhancing their capacity to better manage and exploit their water resources.



## HELP

Since 2000, the ACP participates actively in the Hydrology for the Environment, Life, and Policy (HELP) initiative. Ninety-one basins from 67 countries and 600 non-governmental organizations from 5 continents participate in this program.



## RELOC

The Latin American Network of Basin Organizations is an arm of the International Network of Basin Organizations (INBO). Its objectives include fostering actions for managing watershed resources, such as the exchange of information on past experiences and know-hows and the establishment of an information system on the basins that are part of the network.



## WFA

The Water Forum of the Americas (WFA) is an autonomous and independent program to capitalize and strengthen relationships between organizations, governmental agencies, academia, the private sector, and the civil society with the objective of serving as a platform to facilitate discussion and agreement among them and other actors about relevant water subjects in the American continent.



# PERFORMANCE results

## KEY PERFORMANCE INDICATORS

### KEY FINANCIAL PERFORMANCE INDICATORS\*

(in millions of balboas)

	2009	2010	2011
<b>1. Generation of wealth</b>			
Operating income	1,962	1,972	2,138
Operating results (EBITDA)	1,080	1,039	1,309
Net Utility	1,007	964	1,229
<b>2. Distribution of wealth</b>			
Total Payments to the National Treasury	780	815	1,043
Purchases of goods	172	213	607
Purchases of services	162	179	216
Payments –Contractors Consultancy Services in Panama	1	2	3
Net salary	273	348	339
Total	607,282	742,927	1,164.123

\*More information on the financial performance is available in the 2011 Annual Report, which you can access at [www.panacanal.com](http://www.panacanal.com)

## HUMAN RESOURCES INDICATORS

INDICATORS	2010	2011
Total number of workers	9,759	10,054
Permanent workers	8,175	8,404
Temporary workers	1,584	1,650
Average turnover rate	3.00 %	2.60 %
Percentage of workers covered by a collective bargaining	91 %	91 %
Absenteeism rate	2.48 %	2.15 %
Number of job-related fatal victims	2	0

AVERAGE HOURS OF TRAINING PER WORKER, PER CATEGORY			
Average hours of annual training per worker and per employment category	2009	2010	2011
Administrative support	42	31	31
Manual support	20	19	16
Director	45	15	17
Managerial	77	51	62
Professional	61	57	62
Supervisory	96	75	96
Technician	34	42	44
Work force average	37	38	38

## ENVIRONMENTAL MANAGEMENT INDICATORS

PANAMA CANAL WATERSHED CONSERVATION				
Indicator	Executed 2009-2011 (hectares)	Performed 2011 (hectares)	Goal 2013 (hectares)	Frequency
Number of hectares in the forest enrichment component	155	0	694	Annual
Total number of hectares incorporated in the Environmental Economic Incentives Program (EEIP) <sup>1</sup>	5,641	1,411	20,000	Annual
VEGETATION COVER AND USE OF SOIL				
Indicator	FY11 Goal	FY12 Goal	FY15 Goal	Frequency
Vegetation cover of forest <sup>2</sup>	≥ 48%	≥ 49%	≥ 50%	Quinquennial
WATER GOVERNANCE				
Indicator	FY00/ FY11	DONE FY11	GOAL FY15	Frequency
Number of Local Committees established	31	1	33	Annual
Number of Consultative Committees established <sup>3</sup>	6	1	7	Annual
PANAMA CANAL WATERSHED SUSTAINABILITY				
Indicator	FY11 Goal	Done FY11	FY15 Goal	Frequency
Panama Canal Watershed Sustainability Index <sup>4</sup>	≥ 0.74	= 0.74	≥ 0.75	Quinquennial
CORPORATE ENVIRONMENTAL PERFORMANCE				
Indicator	FY11 Goal	Done FY11	FY15 Goal	Frequency
Corporate Environmental Performance Index(EPI) <sup>5</sup>	75%	76%	80%	Annual
WATER QUALITY				
Indicator	FY11 Goal	FY11 Done	FY15 Goal	Frequency
Water Quality Index (WQI) <sup>6</sup>	≥ 86	= 86	≥ 86	Quinquennial

<sup>1</sup> EEIP includes hectares in the following components: (i) forest protection and natural regeneration; (ii) agro-forestry; (iii) Silvopastoral; (iv) forest reforestation; (v) continuous areas; and (vi) forest enrichment.

<sup>2</sup> The indicator incorporates the following categories: (i) mature forests; (ii) secondary forests; (iii) brushwood and stubble; (iv) reforestation; (v) elephant grass; (vi) crops; (vii) pasture; (viii) bare soil; (ix) settlements, and (x) mining. To be considered a well-preserved and productive forest, the rate should be higher than 30% depending on the above-mentioned categories. Over 48% of the Panama Canal Watershed territory has well-preserved forests and, in addition, there is a favorable 0.06% tendency to increase the vegetation cover.

<sup>3</sup> Local Committees per sub-watershed are autonomous bodies that coordinate with the ACP the socio-environmental management of the Panama Canal Watershed. Local Committees are composed of local authorities; the health committee; church representatives; sports committees; parents associations; grower organizations; the local board; agricultural organizations; housewives; and the water committee, among others. The Watershed Regional Consultative Boards are consultative and collaboration bodies that involve all sectors and social groups present or with interests in the watershed. These boards, in conjunction with governmental institutions, are in charge of developing actions, programs, and projects to comply with the environmental and sustainable development standards per region, and, in the Watershed. These participative community bodies, together with the interinstitutional intervention, contribute to build sustainable processes and awareness about the environmental situation of communities and the region, and how is the water resource being affected by human activities that are conducted within the Watershed.

<sup>4</sup> The Panama Canal Watershed Sustainability Index (WSI) measures the condition of the watershed in the following terms: (i) quality of water; (ii) vegetation cover; (iii) environmental policies, and (iv) human development. The sustainability index of the Panama Canal Watershed is higher than 0.74, which indicates its sustainable management. Through this index, the sustainability of a watershed in the present time and in future scenarios can be forecasted.

<sup>5</sup> EPI includes the following components: training, regulatory compliance, investment, environmental, emissions, effluents, water quality, and forest cover. This index is under construction and all the measurement criteria should have been defined in accordance with their applicability within Panama Canal operations for the year 2012.

<sup>6</sup> The Canal Watershed 2011 Water Quality Index reports an overall WQI value of 86. This value determines that the quality of water ranges from Good to Excellent (range 71-90).

# SURVEY

**We appreciate your opinion. Please respond to the following feedback survey and send it to e-mail: [RSE-info@pancanal.com](mailto:RSE-info@pancanal.com) or to the Panama Canal Administration Building, Balboa Heights, office 201, City of Panama.**

**1. Which stakeholder group do you belong to?**

- ☐ Employee
- ☐ Community
- ☐ Client
- ☐ Supplier
- ☐ Government
- ☐ Other: \_\_\_\_\_

**2. Please rate the Sustainability Report on a scale of 1 to 5, where 1 is poor and 5 is excellent.**

- ☐ Layout and design
- ☐ Organization of subjects
- ☐ Clarity and order of the information provided, ease of comprehension
- ☐ Extent or quantity of information provided
- ☐ Usefulness of information, if it satisfies the expectations
- ☐ Credibility and reliability of the information provided

**3. Please rate the following chapters of the sustainability report on a scale of 1 to 5, where 1 is not important and 5 is very important.**

- ☐ Focused on Sustainability
- ☐ The Panama Canal
- ☐ Transcending Contributions
- ☐ Indispensable Talent
- ☐ Vital Alliance
- ☐ Corporate Volunteer Program

**4. In your opinion, which are the subjects that need to be further discussed in the next Panama Canal Sustainability Report?**

---



---



---

**5. If you have an additional comments or suggestions, please write them down in the following space. We appreciate your cooperation.**

---



---



---



For more information on the Panama Canal, visit the Balboa Administration Building Information Office or call (507) 272-7602 or (507) 272-7677. Internet users can visit the ACP website at [www.pancanal.com](http://www.pancanal.com) or send an e-mail to [info@pancanal.com](mailto:info@pancanal.com)

PRODUCTION AND DIRECTION  
Panama Canal Authority  
Corporate Affairs, Social Responsibility Team  
Telephones (507) 272-1407 / (507) 272-7380  
[www.pancanal.com](http://www.pancanal.com)

DESIGN AND LAYOUT  
Maclovía Araúz de Durling

